REMARKS

The present amendment is submitted in response to the Office Action dated December 17, 2004, which set a three-month period for response, making this amendment due by March 17, 2005.

Claims 1-6 are pending in this application.

In the Office Action, claims 1-6 were rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,765,511 to Schatz.

The Applicants respectfully disagree that the cited reference to Schatz discloses all of the features of independent claim 1. The Applicants furthermore respectfully submit that Schatz is not a proper reference under 35 USC 102 pursuant to the guidelines set forth in the last paragraph of MPEP section 2131, where it is stated that "a claim is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently described, in a single prior art reference", and that "the identical invention must be shown in as complete detail as is contained in the ... claim".

Specifically, Schatz fails to disclose that a valve is regulated is controlled by an electronic control unit in dependence on operating and environmental parameters, as well as nominal value input.

In addition, claim 1 defines that a third control valve 54 is controlled by this control unit (the other valve).

The patent to Schatz merely discloses a comparative circuit 64, which is suited for delivering a control impulse for switching over the three-way valve 36

on the flow from the line connection 28 to the line connection 30 (see Schatz, See Schatz,

The comparative circuit disclosed in Schatz, as well as the control impulse generated by this "circuit" is not necessarily electronic in nature, as defined in claim 1 of the present application. In addition, this comparative circuit does not switch the other valves of the cooling device according to Schatz. The control unit 64 is NOT used for controlling the vale 16.

In claim 1 of the present application, however, it is explicitly claimed that a third control valve 54 is controlled by the electronic control unit 22, which also controls the other valves. Such an electronic control unit, with all of the valves being controlled in dependence on operating and environment parameters, as well as nominal value input, is NOT disclosed by Schatz.

In addition, in the method defined by claim 1, the control valve 54 is completely or partially closed, when a reference temperature of the remaining cooling and heating circuit exceeds a nominal value stored in the control unit 22, and opened, when the reference temperature falls below the nominal value.

Again, such a regulating structure is not disclosed or suggested by Schatz. Schatz merely discloses that the circulation through the heat exchanger is terminated by means of a valve when, on the input and output of the storage medium, temperatures of the heat carrier are closed to a predetermined value. However, it is not disclosed in Schatz that the control valve is completely or partially closed when a reference temperature of the remaining cooling and heating circuit exceeds a nominal value stored in the control unit 22. The device

of Schatz works only with temperature differences, as clearly disclosed in column as a second of Schatz works only with temperature differences, as clearly disclosed in column as a second of Schatz or the comparison of a measured temperature value with a theoretical temperature value stored in the control apparatus is not disclosed or suggested by the method in Schatz.

The regulation strategy of the present invention offers the advantage that volume of heat to be transferred upon charging or discharging of the heat reservoir can be regulated as needed, such that the control valve, when supplying the heat reservoir, adjusts the required coolant flow thereto. As an adjustment parameter, the control valve obtains a signal from a control unit, which, in addition to other operating and environmental parameters, evaluates the temperature of the coolant detected by a temperature sensor. In this regard, the method of the present invention contemplates that the calculation program in the control unit determines a reference temperature with reference to the measuring position of the temperature sensor, which is compared with a stored nominal value. The reference temperature is determined by means of addition or subtraction of a constant value, with the aid of a characteristic line or by means of a model of the cooling system and its relevant temperatures in the control unit. The result of this comparison then forms the adjustment parameter for the control valve. Based on this procedure, the control unit is in the position to change quickly the temperature of the coolant and to sensibly adjust the cooling and heating circuit of the internal combustion engine.

Because Schatz fails to disclose the above features of claim 1, the rejection under Section 102 must be withdrawn. A prior art reference anticipates a claim only if the reference discloses, either expressly or inherently, every limitation of the claim. Absence from the reference of any claimed element negates anticipation. Row v. Dror, 42 USPQ 2d 1550, 1553 (Fed. Cir. 1997) (quoting Kloster Speedsteel AB v. Crucible, Inc., 230 USPQ 81, 84 (Fed. Cir. 1986)).

Also in this amendment, new claim 7 has been added, which combines the features of claim 1 and 6. In addition to failing to disclose the features of claim 1, Schatz also does not disclose using as the control unit a control device of the internal combustion engine, as defined new claim 7.

In light of the foregoing amendments and arguments in support of patentability, the Applicants respectfully submit that this application stands in condition for allowance. Action to this end is courteously solicited.

Should the Examiner have any further comments or suggestions, the undersigned would very much welcome a telephone call in order to discuss appropriate claim language that will place the application into condition for allowance.

Respectfully submitted,

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